

MARINE BIOLOGY

Sonoma County 4-H

Name: _____ Date: _____

Guidelines for Project Proficiency Award

Beginner:

<u>Date</u>	<u>Leader's</u>
<u>Completed</u>	<u>Initials</u>

HEAD:

1. Identify 4 tidal zones and explain differences of each.
(Characteristics). _____
2. Define indicator species or identify two for each tidal zone. _____
3. Identify/discuss these terms: high tide, spring tide, low tide, neap tide, continental shelf, continental slope. _____
4. Explain/diagram tides and the cause of them. _____
5. Understand the differences between these habitats; rocky, sandy piling and estuary. _____

HEART:

1. Attend a low tide field trip. _____
2. Understand and discuss grey whale migration. _____
3. Identify and give 2 characteristics of 3 other species of whales. _____
4. Explain and give examples of why oceans are important to man. _____

HANDS:

1. Discuss how organisms have adapted to survive repeated exposure to the air and sun. _____
2. In a tidal pool, locate and identify 5 common inhabitants. _____
3. Understand causes and explain the differences in salinity of tidal pools, open ocean, estuary. _____
4. Be able to read and understand a tide table book. _____

HEALTH:

1. Identify "red tide", discuss what causes it, and explain its effects on man. _____
2. Discuss how oceans can become polluted, give 2 examples, and explain how ocean pollution affects all life. _____
3. Define "feeding frenzy". _____
4. Give a demonstration at County Presentation Day. _____

Project Leader's Signature of Completion: _____

Date: _____

Club Leader's Signature of Completion: _____

Date: _____